

tetrad and a number of others. *C. pratensis* is considered the main larval foodplant of *P. napi* in Hampshire by Goater (1974. *Butterflies and Moths of Hampshire and the Isle of Wight*) and particularly the first generation in Scotland by Thomson (1980. *The Butterflies of Scotland*). My observations suggest that this plant is the main larval foodplant of the vernal generation of *P. napi* in Co. Clare, Ireland.

Despite *P. napi* being a common butterfly in Kent and the London area, records of its larva being observed are sparse and most of those are given without reference to date, which is important because foodplant preferences may change with time. Not uncommonly there are preferences of a local or geographical nature, sometimes due to the absence of a plant but frequently not so; in the case of bivoltine species there may be different preferences for the generations, and there seems to be some evidence that this is so with *P. napi*. In many parts of the British Isles *C. pratensis* may well be the favourite, or one of the main, larval foodplants for the vernal generation, but I have not found larvae of the later brood upon it; nor records from other sources. On the other hand I have found the second brood larvae to be associated with *C. hirsuta* and *Rorippa sylvestris*, though not the first generation, in north-west Kent; again I can find no such specific observations from other sources. In Kent and the London area especially information on this subject would be most welcome because the relevant recorders accept that larval foodplants should be reported, and to include date and locality.— B.K. WEST, 36 Briar Road, Dartford, Kent DA5 2HN.

Thanatosis in *Inachis io* (L.) (Nymphalidae)

In July 1983, on a visit to Bentley Wood and Blackmoor Copse near Salisbury, it was discovered that *Gonepteryx rhamni* (L.) (Pieridae) could be picked off flowers on which they were feeding and placed on an open hand like a wafer, where they would remain inert often for several minutes. Picking them off flowers was most easily accomplished by a gentle pincer movement of the index finger and third digit. Almost invariably, the butterfly responded by becoming rigid with its legs tucked up under its body, as illustrated in Dennis (1984. *Entomologist's Gazette*, **35**: 6-7). Similar experiments on *Inachis io*, carried out at the same time, were unsuccessful. Although, initially, they responded in the same way, they burst into flight when released on the hand.

During early August 1997, this simple experiment was repeated with *I. io* feeding on garden *buddleia*. Of 23 individuals picked off flowers while feeding, 17 became immobile on the palm (74%), whereas six burst into flight immediately on release. All but five of the individuals undergoing thanatosis were encouraged back to activity after five to ten seconds by raising the wing tip. Five were taken into the shade to return to activity in their own time; respectively, these took 1.30 mins; 2.35 mins; 8.15 mins; 6.20 mins and 5.05 mins to recover. On leaving, they rapidly attained an upright position, opened their wings, alternatively spreading and closing them as they walked about and casually flew off to settle on nearby bushes or the *buddleia* before recommencing to feed. Shade temperatures were very high during this period and no attempt was made to bask before flight. In late August and early

September, the experiment was repeated on *Aglais urticae* (L.) (Nymphalidae). Only seven of the 21 individuals (33.3%) responded by remaining stationary, the remainder bursting into flight on release.

It is interesting that the outcome of this experiment in *I. io* in 1997 differed from that in 1983. It is also puzzling why *I. io* and *A. urticae* did not behave in much the same way. Underlying these observations is the question why individuals of each species should respond differently. One possible reason may be variation in the position and pressure placed across the wings. It was discovered that greater pressure applied closer to the wing base encouraged initially unresponsive individuals to become inert. Differences in response between 1983 and 1997 may also relate to nectaring activity and nectaring time. Resident Nymphalids (i.e., *I. io*, *A. urticae*, *Polygonia c-album* (L.)) feed up in late summer and hibernate in the same manner as *G. rhamni*. They can be particularly engrossed in nectaring and vulnerable to predation prior to hibernation, as indicated by damage (beak marks) on the wings of both *I. io* and *A. urticae* during August and September 1997. Thus, they are more easily approached and caught in the way described above than are Pieridae such as *P. brassicae*, *P. rapae* and *P. napi*. However, some individuals were clearly more active and wary than others. An interesting experiment would be to compare the responses of first and second brood individuals, where these occur, as these two groups invest different amounts of time in feeding.

Thanatosis is likely to extend to all species that hibernate as adults and have cryptic ventral wing surfaces; it is also more likely to be found in species which are lateral baskers and are robust. The closed ventral wing surfaces in *G. rhamni* and *I. io* are both leaf mimics. They differ in that *I. io* is basically a dorsal absorbence basker, but it can also undoubtedly engage in lateral absorbence basking. It would be interesting to test this behaviour in butterflies that have different combinations of these attributes, within and between different higher taxa. For instance, among Pieridae, it would be interesting to compare *G. rhamni* with *Colias croceus* (Geoffroy) (Pieridae), whose wing undersurface is cryptic and which is a lateral basker, but which does not overwinter as an adult.— R.L.H. DENNIS, 4 Fairfax Drive, Wilmslow, Cheshire SK9 6EY.

Butterfly Hunting in the Rhinns of Galloway

Having been tied to east Fife by the lure of butterfly transects for most of the past 20 years I have spent little time in the west of Scotland in summer – that mythical land of Chequered Skippers, Marsh Fritillaries and Wall, where Large Skippers, Speckled Wood and Scotch Argus abound and Peacocks are plentiful.

On 3 July I had to pick up a friend from Prestwick and put them on the Belfast ferry the next day from Stranraer. The day started sunny so rather than rush home I decided to visit the Rhinns of Galloway before driving eastwards. It soon clouded over, not even whites were flying, it was not the most promising of days. I headed north towards Corsewall Point and took a track down towards the rocky coast where the OS map shows St Columba's Well. A number of small burns cross the route along the coast towards the lighthouse and the vegetation consists of small marshes